

IN THE CLAIMS

1) Please cancel Claims 1-26.

2) Please add new Claims 27-46 as follows:

27. (New) For use in a CDMA receiver, a noise reduction circuit for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of said chips having a value corresponding to Logic 0 or Logic 1, said noise reduction circuit comprising:

a sampling circuit capable of generating a first sequence of samples from said received signal; and

a controller capable of identifying samples in said first sequence of samples corresponding to Logic 0 chips and identifying samples in said first sequence of samples corresponding to Logic 1 chips, wherein said controller is further capable of generating a second sequence of samples by at least one of:

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 0 chips, wherein each of said shifted samples corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0 chip to a second position corresponding to a Logic 0 chip; and

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 1 chips, wherein each of said shifted samples corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1 chip to a second position corresponding to a Logic 1 chip.

28. (New) The noise reduction circuit set forth in Claim 27 wherein said controller adds said first and second sequences of samples to generate a composite signal having a reduced signal-to-noise ratio.

29. (New) The noise reduction circuit set forth in Claim 27 wherein said CDMA receiver is disposed in a base station of a wireless network.

30 (New) The noise reduction circuit set forth in Claim 27 wherein said CDMA receiver is disposed in a mobile station capable of communicating with a wireless network.

31. (New) The noise reduction circuit set forth in Claim 27 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 0 chips according to one of a random process algorithm and a predetermined algorithm.

32. (New) The noise reduction circuit set forth in Claim 27 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 1 chips according to one of a random process algorithm and a predetermined algorithm.

33. (New) A CDMA wireless network comprising a plurality of base stations, each of said base stations comprising a noise reduction circuit for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of said chips having a value corresponding to Logic 0 or Logic 1, said noise reduction circuit comprising:

a sampling circuit capable of generating a first sequence of samples from said received signal; and

a controller capable of identifying samples in said first sequence of samples corresponding to Logic 0 chips and identifying samples in said first sequence of samples corresponding to Logic 1 chips, wherein said controller is further capable of generating a second sequence of samples by at least one of:

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 0 chips, wherein each of said shifted samples corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0 chip to a second position corresponding to a Logic 0 chip; and

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 1 chips, wherein each of said shifted samples corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1 chip to a second position corresponding to a Logic 1 chip.

34. (New) The CDMA wireless network set forth in Claim 33 wherein said controller adds said first and second sequences of samples to generate a composite signal having a reduced signal-to-noise ratio.

35. (New) The CDMA wireless network set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 0 chips according to one of a random process algorithm and a predetermined algorithm.

36. (New) The CDMA wireless network set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 1 chips according to one of a random process algorithm and a predetermined algorithm.

37. (New) A wireless mobile station capable of communicating with a plurality of base stations in a wireless network, said wireless mobile station comprising a reduction circuit for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of said chips having a value corresponding to Logic 0 or Logic 1, said noise reduction circuit comprising:

a sampling circuit capable of generating a first sequence of samples from said received signal; and

a controller capable of identifying samples in said first sequence of samples corresponding to Logic 0 chips and identifying samples in said first sequence of samples corresponding to Logic 1 chips, wherein said controller is further capable of generating a second sequence of samples by at least one of:

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 0 chips, wherein each of said shifted samples corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0

chip to a second position corresponding to a Logic 0 chip; and

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 1 chips, wherein each of said shifted samples corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1 chip to a second position corresponding to a Logic 1 chip.

38. (New) The wireless mobile station set forth in Claim 37 wherein said controller adds said first and second sequences of samples to generate a composite signal having a reduced signal-to-noise ratio.

39. (New) The wireless mobile station set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 0 chips according to one of a random process algorithm and a predetermined algorithm.

40. (New) The wireless mobile station set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 1 chips according to one of a random process algorithm and a predetermined algorithm.

41. (New) For use in a CDMA receiver, a method for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of the chips having a value corresponding to Logic 0 or Logic 1, the method comprising the steps of:

generating a first sequence of samples from the received signal; and

identifying samples in the first sequence of samples corresponding to Logic 0 chips;
identifying samples in the first sequence of samples corresponding to Logic 1 chips; and
generating a second sequence of samples from the first sequence of samples by at least one
of:

shifting positions within the first sequence of samples of at least some of the
identified samples corresponding to Logic 0 chips, wherein each of the shifted samples
corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0
chip to a second position corresponding to a Logic 0 chip; and

shifting positions within the first sequence of samples of at least some of the
identified samples corresponding to Logic 1 chips, wherein each of the shifted samples
corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1
chip to a second position corresponding to a Logic 1 chip..

42. (New) The method set forth in Claim 41 further comprising the step of adding the first
and second sequences of samples to generate a composite signal having a reduced signal-to-noise
ratio.

43. (New) The method set forth in Claim 41 wherein the CDMA receiver is disposed in a
base station of a wireless network.

44 (New) The method set forth in Claim 41 wherein the CDMA receiver is disposed in a
mobile station capable of communicating with a wireless network.

45. (New) The method set forth in Claim 41 wherein the step of shifting positions of the at least some of the identified samples corresponding to Logic 0 chips shifts the positions according to one of a random process algorithm and a predetermined algorithm.

46. (New) The method set forth in Claim 41 wherein the step of shifting positions of the at least some of the identified samples corresponding to Logic 1 chips shifts the positions according to one of a random process algorithm and a predetermined algorithm.